

# Work Order ID 91290

\*91290\*

Page 1

October-05-12 9:26:28 AM

Item ID: 647.4711

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Item Name: Doubler

Stop \*NS2\*

Start Date: 10/04/12 Start Qty: 15.00

\*15\*

Cust Item ID:

Required Date: 10/31/12 Req'd Qty: 15.00

\*15\*

Customer:

Reference:

Approvals: Process Plan: MCS Date: 12-10-05 Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start \*NR1\*

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
647.4700	N/C								

E10

0.00

\*110\*

Waterjet

Memo

0.00

FLOW CNC Waterjet

2674 - 063

1-Cut as per Dwg

Dwg Rev: A/C

Prog Rev: N/C

2-Deburr if necessary

15 0 Jm 12-10-13

120

QC2- Inspect parts off machine FAI/FAIB

0.00

\*120\*

QC

Memo

0.00

Quality Control

15 0 Jm 12-10-13

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____				<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		<b>AGAINST DEPARTMENT/PROCESS</b>  <div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/>            Machining <input type="checkbox"/>            Thermoforming <input type="checkbox"/>            Large Fab <input type="checkbox"/> </div> <div>           Crosstube <input type="checkbox"/>            Small Fab <input type="checkbox"/>            Finishing <input type="checkbox"/>            Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/>            Prod. Eng. Coord. <input type="checkbox"/>            Rec/Store/Packaging <input type="checkbox"/>            Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/>            Quality <input type="checkbox"/>            Other <input type="checkbox"/> </div> </div>					
<b>Root Cause</b>	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data <input type="checkbox"/>											
Equip/Tooling <input type="checkbox"/>											
Operator <input type="checkbox"/>											
Material <input type="checkbox"/>											
Setup <input type="checkbox"/>											
Other <input type="checkbox"/>											
Process <input type="checkbox"/>											
Supplier <input type="checkbox"/>											
Training <input type="checkbox"/>											
Unapproved <input type="checkbox"/>											

FAULT CATEGORY									
<b>Landing Gear</b>			<b>General</b>						
<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Grain	<input type="checkbox"/> Ovalized	<input type="checkbox"/> Pressure/Forced					
<input type="checkbox"/> Centre Not Concentric to O/S	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Hardware	<input type="checkbox"/> Over/Under tolerance	<input type="checkbox"/> Temperature/Cure					
<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Inspection Incomplete	<input type="checkbox"/> Part Incorrect	<input type="checkbox"/> Weld					
<input type="checkbox"/> Crushed/Crimped	<input type="checkbox"/> Burrs	<input type="checkbox"/> Instructions Incomplete/Unclear	<input type="checkbox"/> Part Lost/Missing	<input type="checkbox"/> Wrong Stock Pulled					
<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Maintenance	<input type="checkbox"/> Part Moved						
<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Countersink	<input type="checkbox"/> Mislabeled	<input type="checkbox"/> Positioned Wrong	<input type="checkbox"/> Other					
<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Misread	<input type="checkbox"/> Power Loss/Surge						
<input type="checkbox"/> Ripples in Bend	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Offset							
<input type="checkbox"/> Torque Waves in Extrusion	<input type="checkbox"/> Drawing	<input type="checkbox"/> Out of Calibration							
<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Sequence							
<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Folio	<input type="checkbox"/> Outside Dimensions							

**Work Order ID 91290****\*91290\***

Page 2

October-05-12 9:26:28 AM

Item ID: 647.4711

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Item Name: Doubler

Stop **\*NS2\***

Start Date: 10/04/12 Start Qty: 15.00

**\*15\***

Cust Item ID:

Required Date: 10/31/12 Req'd Qty: 15.00

**\*15\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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130

QC8- Inspect parts - second check

0.00

**\*130\***

QC

Memo

0.00

Quality Control

140

Outsource process-Anodize per QSI017 4.1.10.1

0.00

**\*140\***

Outsource4

Memo

0.00

Outsource process - Anodize

HARD ANODIZE, COLOR BLACK AS PER DWG.(SEE NOTE 2)

150

Receive &amp; Inspect for Damage &amp; Mat'l Certs

0.00

**\*150\***

Packaging

Memo

0.00

Packaging

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____				<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width: 100%; border: none;"> <tr> <td style="width: 25%;">Skid-tube <input type="checkbox"/></td> <td style="width: 25%;">Crosstube <input type="checkbox"/></td> <td style="width: 25%;">Water Jet <input type="checkbox"/></td> <td style="width: 25%;">Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>						Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
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Supplier <input type="checkbox"/>																											
Training <input type="checkbox"/>																											
Unapproved <input type="checkbox"/>																											
<b>FAULT CATEGORY</b>																											
<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube			<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio			<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions			<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge  _____ _____ _____		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled  <input type="checkbox"/> Other _____ _____ _____																



NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____				<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		<b>AGAINST DEPARTMENT/PROCESS</b>  <div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/>            Machining <input type="checkbox"/>            Thermoforming <input type="checkbox"/>            Large Fab <input type="checkbox"/> </div> <div>           Crosstube <input type="checkbox"/>            Small Fab <input type="checkbox"/>            Finishing <input type="checkbox"/>            Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/>            Prod. Eng. Coord. <input type="checkbox"/>            Rec/Store/Packaging <input type="checkbox"/>            Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/>            Quality <input type="checkbox"/>            Other <input type="checkbox"/> </div> </div>					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data											
Equip/Tooling											
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FAULT CATEGORY											
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# Work Order ID 91290

\*91290\*

Page 4

October-05-12 9:26:28 AM

Item ID: 647.4711 Accept \*N900040100\* Setup Start \*NS1\*  
Revision ID: Stop \*NS2\*  
Item Name: Doubler  
Start Date: 10/04/12 Start Qty: 15.00 \*15\* Cust Item ID:  
Required Date: 10/31/12 Req'd Qty: 15.00 \*15\* Customer:  
Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start \*NR1\*  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190	Identify as per dwg & Stock Location	0.00							
*190*									
Packaging	Memo	0.00							
Packaging	***IDENTIFY AS PER APICAL MPP-120 BY STAMPING P# AND REV***								
200	QC21- Final Inspection - Work Order Release	0.00							
*200*									
QC	Memo	0.00							
Quality Control									

15x  
12-12-6  
12/12/10  
12-7-12

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____				<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		<b>AGAINST DEPARTMENT/PROCESS</b>  <div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/>            Machining <input type="checkbox"/>            Thermoforming <input type="checkbox"/>            Large Fab <input type="checkbox"/> </div> <div>           Crosstube <input type="checkbox"/>            Small Fab <input type="checkbox"/>            Finishing <input type="checkbox"/>            Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/>            Prod. Eng. Coord. <input type="checkbox"/>            Rec/Store/Packaging <input type="checkbox"/>            Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/>            Quality <input type="checkbox"/>            Other <input type="checkbox"/> </div> </div>					
<b>Root Cause</b>	<b>Date</b>	<b>Step</b>	<b>Qty</b>	<b>Description of work order update or Non-conformance</b>	<b>Initial Chief Eng</b>	<b>Action Description</b>	<b>Sign &amp; Date</b>	<b>Verification</b>	<b>QC Inspector</b>		
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
<b>FAULT CATEGORY</b>											
<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube			<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio			<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions			<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge  <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled  <input type="checkbox"/> Other		



# Picklist Print

October-05-12 9:26:27 AM

Page 1

Work Order ID: 91290

Parent Item: 647.4711

Parent Item Name: Doubler

Start Date: 10/04/12

Required Date: 10/31/12

Start Qty: 15.00

Required Qty: 15.00

Comments: IPP REV:A 12.09.19 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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M2024T3S.063

2024-T3 .063 sheet

Purchased

No

110

sf

122.4200

1.153

~~18.205~~263  
18.25

Jm 12-10-13

Location

Loc Qty

Loc Code

MAT022

122.42

119916

10.1

121197

16.32

123096

96

123096

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____				<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width:100%; border: none;"> <tr> <td style="width:15%;">Skid-tube <input type="checkbox"/></td> <td style="width:15%;">Crosstube <input type="checkbox"/></td> <td style="width:15%;">Water Jet <input type="checkbox"/></td> <td style="width:15%;">Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>						Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
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<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Folio	<input type="checkbox"/> Outside Dimensions																									

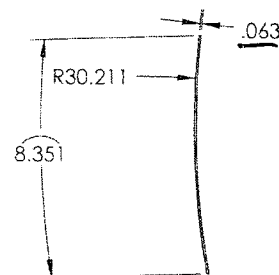
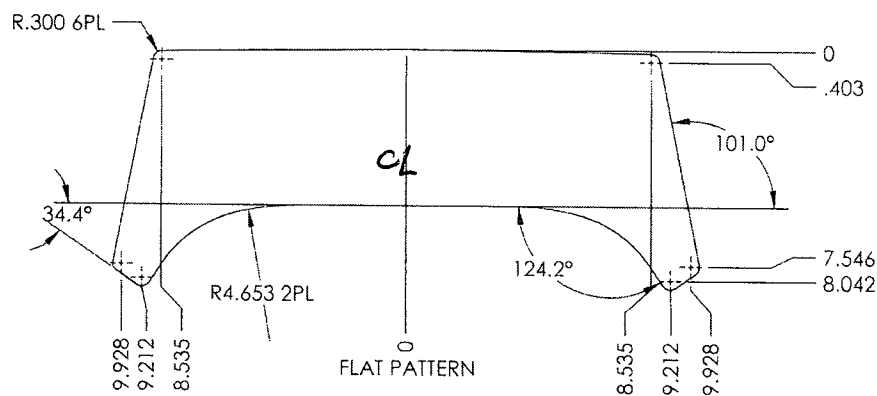
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES. ANY REPRODUCTION IN ANY FORM OR MANNER WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.

NOTES: UNLESS OTHERWISE SPECIFIED

1. MATERIAL: ALUMINUM 2024-T3 PER AMS-QQ-A-250/4
2. FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III, CLASS 2, COLOR BLACK;  
CARDINAL 4860-50 PRETREATMENT PRIMER  
PRIME IAW MIL-P-23377J TYPE I CLASS N
3. DEBURR AND BREAK ALL SHARP EDGES
4. IDENTIFY IAW MPP-120

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER

NO. 91290 MCT  
12-10-05

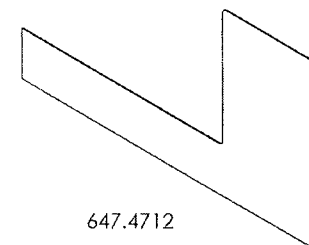


QTY	PART #	DESCRIPTION	MAT'L	SPEC.
1	647.4719	CLIP FWD	△	△
1	647.4718	CLIP AFT RH	△	△
1	647.4717	CLIP AFT LH	△	△
1	647.4716	SPACER	△	△
1	647.4715	CLIP RH	△	△
1	647.4714	CLIP LH	△	△
1	647.4713	BRACKET	△	△
1	647.4712	DOUBLER	△	△
1	647.4711	DOUBLER	△	△
PARTS LIST				
APICAL INDUSTRIES				
2608 TEMPLE HEIGHTS DR.				
OCEANSIDE, CA. 92056-3512 (760)724-5300				
SHEETMETAL				
1	647.4700	CLIP FWD	△	△
1	647.4700	CLIP AFT RH	△	△
1	647.4700	CLIP AFT LH	△	△
1	647.4700	SPACER	△	△
1	647.4700	CLIP RH	△	△
1	647.4700	CLIP LH	△	△
1	647.4700	BRACKET	△	△
1	647.4700	DOUBLER	△	△
1	647.4700	DOUBLER	△	△
SCALE: NONE				
SHEET 1 OF 7				

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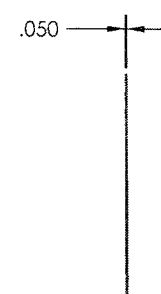
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REV	DESCRIPTION	DATE	APPROVED

91290

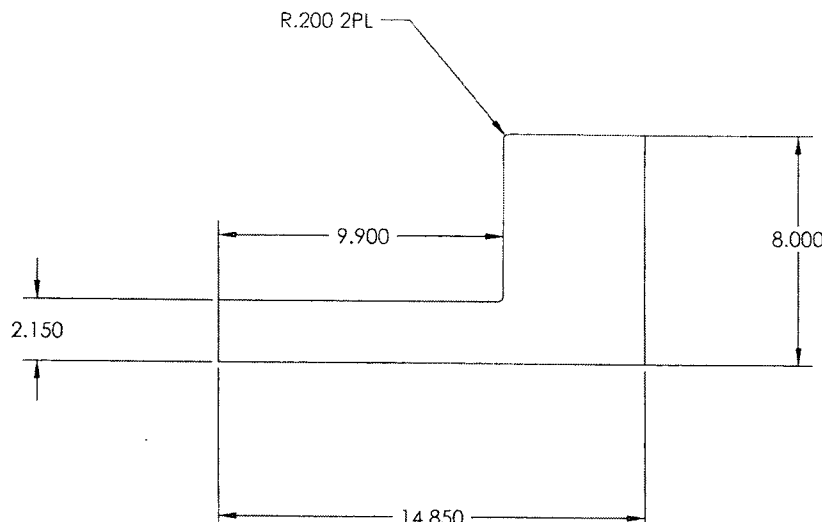


647.4712

R.200 2PL



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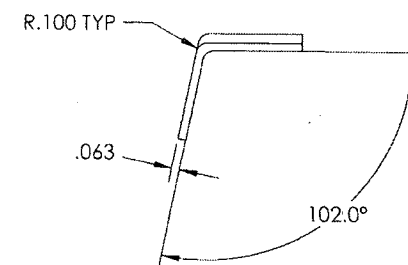
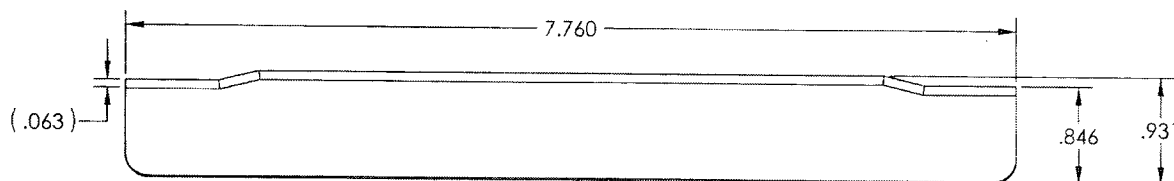
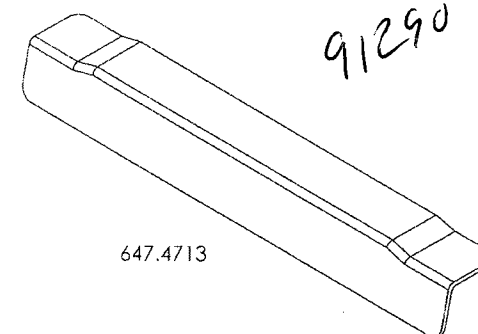
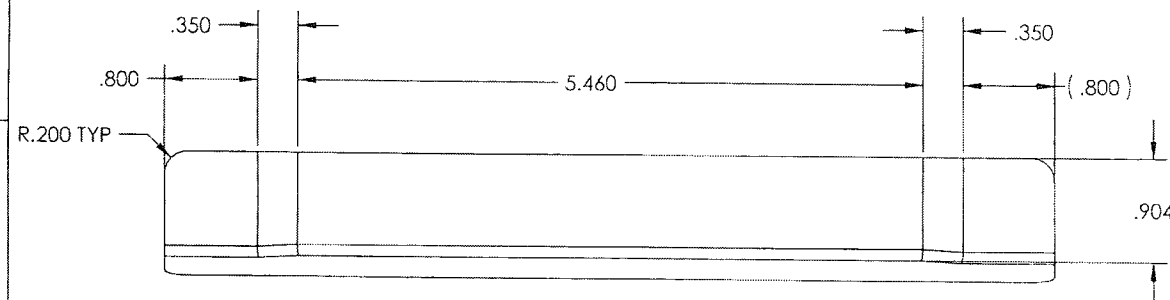


ORIGINAL DATE 10/1/2008		APICAL INDUSTRIES	
DRAWN BY A. QUINN	CHECKED D. BARTLETT	2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWING APPROVAL P. BARNES		SHEETMETAL	
CONTRACT NO.			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES DECIMALS ARE .001 FRACTIONS ARE 1/16 ANGLES ± .3°		SHEET 6	REV. N/C
CAGE CODE 07ME6		DWG NO. 647.4700	SCALE NONE
SHEET 6		SHEET 2 OF 7	



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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED

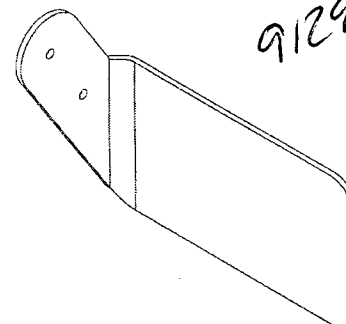
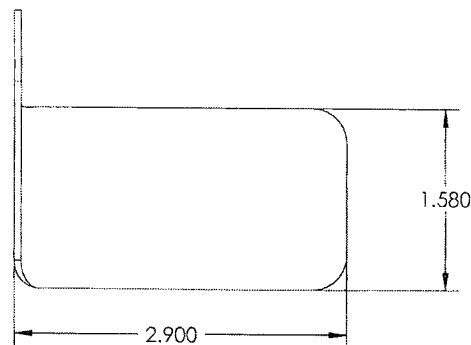
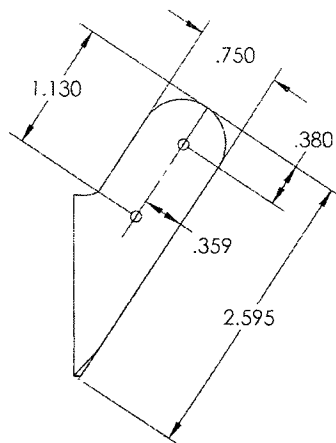


ORIGINAL DATE JANUARY 1988		APICAL INDUSTRIES	
DRAWN BY: DIRECTOR		2608 TEMPLE HEIGHTS DR.	
CHECKED BY: DIRECTOR		OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWING APPROVAL		SHEETMETAL	
BY: DIRECTOR			
CONTRACT NO.			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES DIMENSIONS ARE 2 PLACE DECIMALS ±.01 ANGLES ±.5°		SEE CASE CODE B 07M26	DATE NO. 647.4700
		SCALE NONE	REV. N/C
		SHEET 3 OF 7	

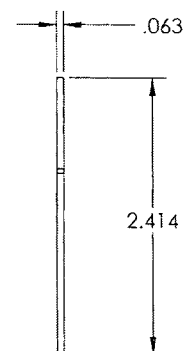
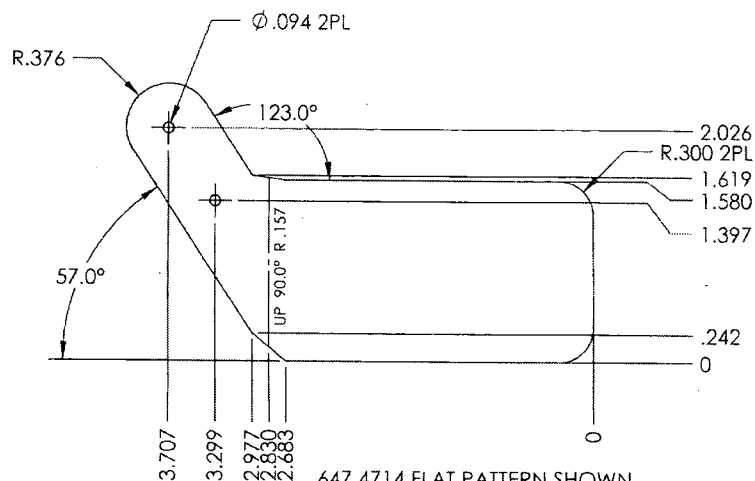


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REVISIONS			
REV	DESCRIPTION	DATE	APPROVED



647.4714 SHOWN  
647.4715 OPPOSITE



647.4714 FLAT PATTERN SHOWN  
647.4715 BEND DOWN

OFFICIAL DATE DATE: 10/12/09		APICAL INDUSTRIES	
DRAWN BY: J. QUINN		2608 TEMPLE HEIGHTS DR.	
CHECKED BY: J. QUINN		OCEANSIDE, CA, 92056-3512 (760)724-5300	
DRAWING APPROVAL BY: J. QUINN		SHEETMETAL	
CONTRACT NO.		SHEET 4 OF 7	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°		REV. B	REV. N/C
SCALE: NONE		DWG. NO. 647.4700	

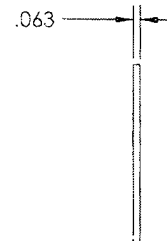
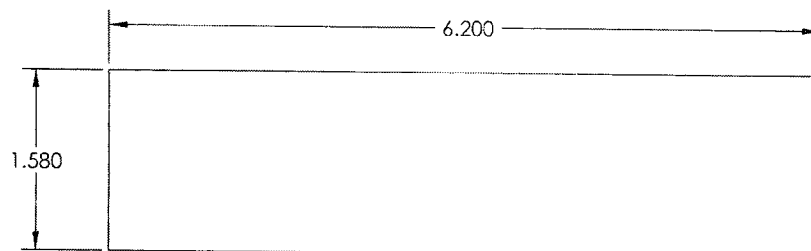


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REVISIONS			
REV	DESCRIPTION	DATE	APPROVED

91290

647.4716



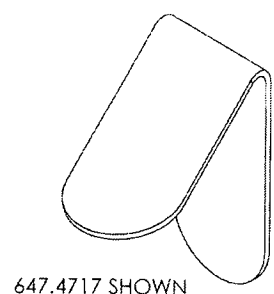
OFFICIAL DATE 10/13/09		<b>APICAL INDUSTRIES</b> 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3612 (760)724-5300	
DRAWN BY A. GILLEN		CHECKED BY D. BARNETT	
DRAWING APPROVAL BY CONTRACTING		<b>SHEETMETAL</b>	
SIZE B	(BASE CODE) 07M36	DWG. NO. 647.4700	REV. N/C
SCALE NONE		SHEET 5 OF 7	



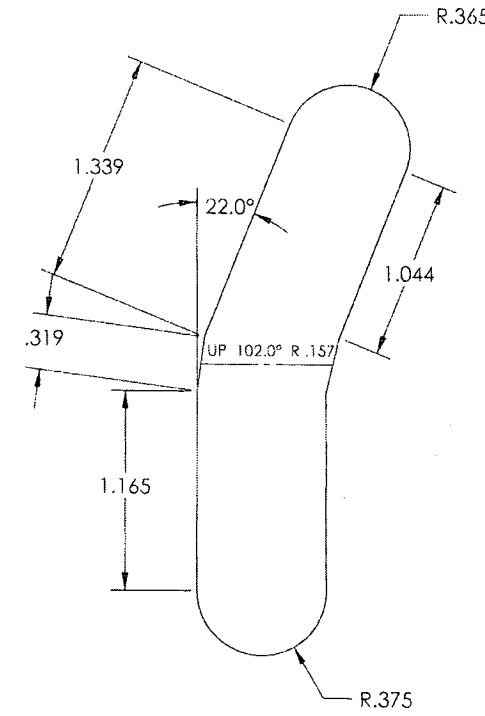
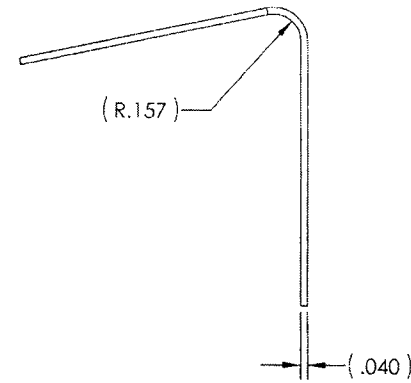
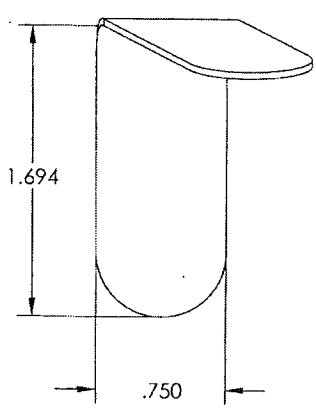
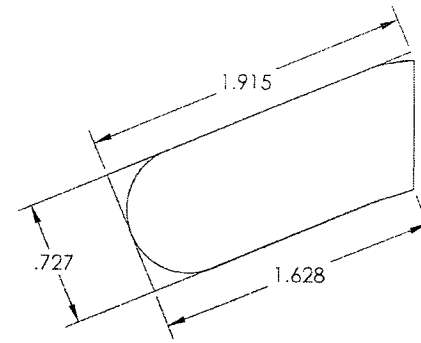
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REV.	DESCRIPTION	DATE	APPROVER

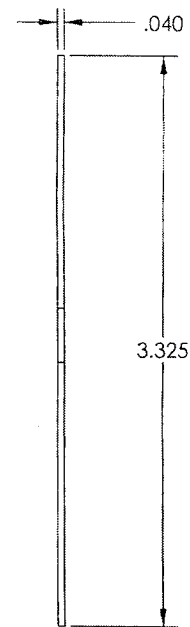
91290



647.4717 SHOWN



647.4717 FLAT PATTERN SHOWN  
647.4718 BEND DOWN

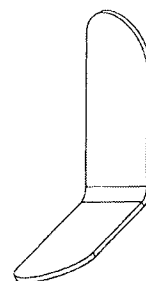
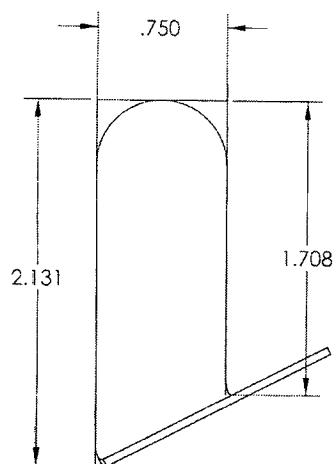


CREATED DATE	01/12/00	APICAL INDUSTRIES	
DRAWN BY	SHREVE	2608 TEMPLE HEIGHTS CR.	
CHECKED BY	SHREVE	OCEANSIDE, CA. 92056-3512 (760)724-5300	
DESIGNED BY	SHREVE	SHEETMETAL	
CONTRACT NO.			
UNLESS OTHERWISE SPECIFIED			
DIMENSIONS ARE IN INCHES			
TOLERANCES ARE			
3 PLACE DECIMALS .001			
ANGLES ± .1°			
SHEET	CAGE CODE	DWG. NO.	REV.
B	07M26	647.4700	N/C
SCALE		NOTE	SHEET 6 OF 7

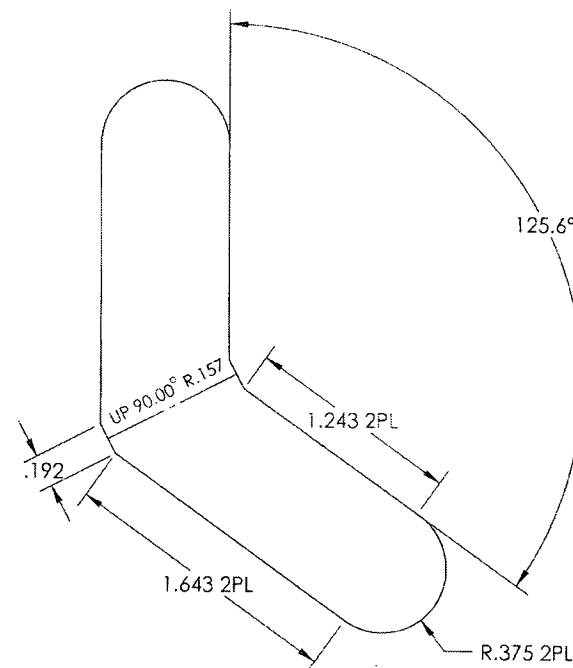
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REV	DESCRIPTION	DATE	APPROVED

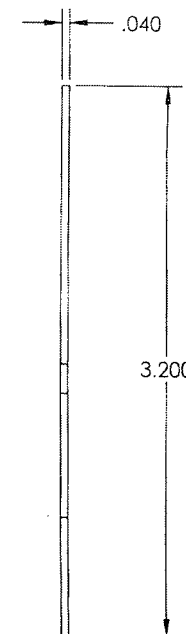
91290



647.4719



647.4719 FLAT PATTERN



ORIGINAL DATE DRAWN BY A. QUINN DESIGNED BY D. BARBER CHECKED BY D. BARBER CONTRACT NO.		<b>APICAL INDUSTRIES</b> 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES 1/16" FRACTIONS ARE 2 PLACE DECIMALS 1/32" ANGLES 1/2°		VEE CAGE CODE B 07A126	QMG NO. <b>647.4700</b>
SCALE NONE		REV N/C	SHEET 7 OF 7





A.T.G. Industries Inc.  
 731, rue Industrielle Rd.  
 PLATING DEPARTMENT  
 Rockland, On K4K 1T2  
 Canada  
 Ph: (613) 446-4544  
 Fax: (613) 446-4556

## Pack List

Number: 62027

Date: 05-Nov-12

To

DART AEROSPACE LTD  
 1270 ABERDEEN ST.  
 HAWKESBURY, ON K6A 1K7  
 Canada

Ship To

DART AEROSPACE LTD  
 1270 ABERDEEN ST.  
 HAWKESBURY, ON K6A 1K7  
 Canada

Ph: 613-632-5200

Fax: 613-632-1185

Ph: 613-632-5200

Fax: 613-632-1185

Terms		Ship Via	
Quantity	Description		
1 lot	Part: ASST 10 PCS 646.9813 10 PCS 646.9811 10 PCS 646.9812 10 PCS 646.9812 2 PCS 646.9811 15 PCS 646.4711 15 PCS 647.4716 15 PCS 647.4712 15 PCS 647.4717 15 PCS 647.4714 15 PCS 647.4715 15 PCS 647.4718 HARD ANODIZE BLACK MIL-A-8625 TYPE III CLASS 2 Job: 20120674	Rev:	PO: PO18153 Line:
1 lot	Part: ASST 7 PCS 647.1810 14 PCS 647.1811 91 PCS 647.1812 2 PCS 647.1612 HARD ANODIZE BLACK MIL-A-8625 TYPE III CLASS 2 Job: 20120673	Rev:	PO: PO18304 Line:
Certificate of Conformance			



A.T.G. Industries Inc.  
731, rue Industrielle Rd.  
PLATING DEPARTMENT  
Rockland, On K4K 1T2  
Canada  
Ph: (613) 446-4544  
Fax: (613) 446-4556

### Pack List

Number: 62027

Date: 05-Nov-12

#### To

DART AEROSPACE LTD  
1270 ABERDEEN ST.  
HAWKESBURY, ON K6A 1K7  
Canada

#### Ship To

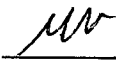
DART AEROSPACE LTD  
1270 ABERDEEN ST.  
HAWKESBURY, ON K6A 1K7  
Canada

Ph: 613-632-5200

Fax: 613-632-1185

Ph: 613-632-5200

Fax: 613-632-1185

Terms		Ship Via
Quantity	Description	
	A.T.G. Industries certifies that all items in this shipment are in conformance with all requirements, specifications and drawings referenced in the purchase order.	
	ISO 9001 : 2008 REGISTERED ATG SALES-2010 TERMS APPLY	
	DATE: <u>5/12/12</u>	
	CERTIFIED SIGNATURE: <u></u>	
	RECEIVER SIGNATURE: _____	